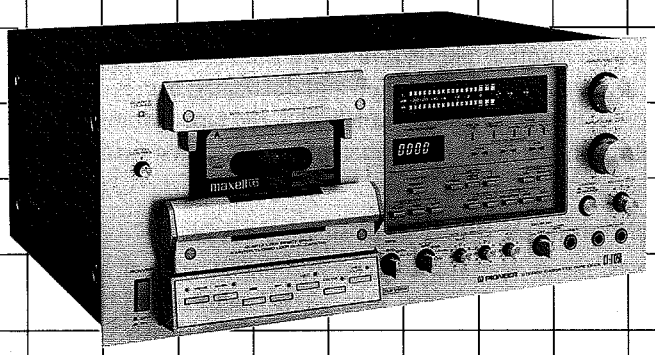
CASSETTE TAPE DECK

CT-F1250

OPERATING INSTRUCTIONS

KU
KC



Before operating your CT-F1250 CASSETTE TAPE DECK, please read these Operating Instructions through and then you will know how to connect the tape deck properly and operate the tape deck correctly. This will ensure that you enjoy the stereo performance to the full.
After reading these instructions, keep them in a safe place together with the warranty card. Then you will know exactly where it is in case you wish to refer to it.

CONTENTS

Features 2
Precautions 3
Front Panel Facilities 4
Connections 7
Basic Operations 8
Cassette Tapes 9
How to use the Tape Calibration 10
Playback 12
Repeat Playback Function 13
Recording 14
Microphone Recording 16
Maintenance 16
Operations with the Timer 17
The Dolby NR System 18
Specifications 19
Troubleshooting 20
Schematic Diagram ..... Insertion
Leading Brands of Tapes ..... Insertion

IMPORTANT NOTICE

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep in a secure area. This is for your security.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

PIONEER®

FEATURES

Tape calibration system

Even if you are using the same type of tape, the characteristics vary slightly from tape to tape. With Pioneer's previous tape decks, the reference bias and equalizer values have been fixed by a uniform standard tape, and it has not been possible to cope with slight differences even by changing the position of the tape selector. This deck, however, adopts the tape calibration system which detects the optimum bias, equalizer and recording/playback level (sensitivity) and which adjusts the recording circuit so as to obtain a flat frequency response up to the highest frequency range limit with the minimum of distortion for each and every tape.

Dual capstan system with direct drive using a quartz PLL brushless DC servomotor

The quartz PLL (phase-locked loop) system serves to compare the output waveforms of the frequency generator, which is incorporated into the capstan motor rotor, with the waveforms from the high-precision reference oscillator which uses a quartz crystal, and thereby controls the rotational speed of the motor. This system features superior time, and temperature drift and load resistance characteristics and it always ensures a constant rotational speed.
This feature goes hand in hand with the closed-loop dual capstan system, whereby a capstan is placed on both sides of the heads, to eliminate level fluctuations and sound variations caused by irregularities in the cassette tape and also to provide stable tape travel.

Three-head system with Uni-crystal combination head

In order to do full justice not only to metal tapes but also to chrome and ferrichrome tapes, a uni-crystal recording/playback combination head is employed. In addition, the erase head features superior temperature characteristics in order that the most is made of the metal tape's properties. This combination improves the input/output characteristics, the distortion and the frequency response and also provides a superlative signal-to-noise ratio. The recording and playback heads are amalgamated into a single packaged combination head so that the quality of a recording can be checked at the flip of a switch.

Feather-touch tape function buttons using LSI logic control circuitry

The adoption of single-packaged IC logic control circuitry makes it possible to select the tape travel in a smooth feather-touch operation. Even when switching from the fast forward or rewind mode to the playback mode, the tape is not damaged in any way and the switchover is both direct and speedy. Another big feature is the LSI-stored program which deals with faulty operation and duplicated depressing of the function buttons and which puts the tape automatically through the stop mode when necessary during switchover.

Digital bar-graph fluorescent display meter

The level meter features all-electronic digital control and bar-graph fluorescent display tubes. The length of the bars are made to correspond to the strength of the signals supplied both for the left and right channels in parallel. This makes it easy to set the recording level accurately.

4-digit tape counter

The tape counter is all-electronic thanks to a built-in IC which detects the rotation of the reel base in pulses and displays them on the 4-digit fluorescent display tube.

3-stage meter selector switch

The meter selector switch performs a triple function. It can be used to display the average signal strength of a program source on the florescan meter, the peak level for approximately two seconds or the peak hold value (by holding the maximum value on the display). This handy mechanism allows the recording level to be set easily in accordance with the content of the program source which is to be recorded.

Repeat playback, memory stop, memory play functions

A total of six programs are stored in the LSI logic circuitry. Memory stop involves bringing the tape back automatically to the position where the tape counter was set to "0000", memory play entails the automatic playback of the tape from the stop position, and repeat playback involves repeating play from the start of the tape automatically or from the place on the tape where the counter was set to "0000" during playback after rewinding to that position. All these programs are stored in the LSI.

Pitch control knob

This allows the deck's tape to travel up to 6% faster or slower than the rated speed (4.8 cm/sec.) during playback. Since it is possible to raise or lower the musical steps up to a semitone, you can adjust the musical steps of a program you are playing back to harmonize with those accompanying a musical instrument you are playing. This function is also effective when using the tape deck for accompaniment to songs. The quartz locked system is employed when the pitch control knob is set to its center click-stop position.

*Dolby noise reduction system

The Dolby noise reduction system serves to cut down annoying tape hiss by about 10dB without compromising the frequency response. It serves to expand the dynamic range and enable recording with a good signal-to-noise ratio. Since this deck incorporates a 3-head system, the effectiveness of the Dolby system can be monitored during the actual recording.

Multiplex filter switch

Some FM tuners are affected by the leakage of the stereo pilot signal (19kHz) into the output. If this switch is set to ON while recording an FM stereo program with the Dolby NR system, the pilot signal is suppressed and the recording with the Dolby NR system is more effective.

Rec mute switch

When this button is depressed during recording, the tape continues to run but the recording signals are cut out. This function is useful for creating unrecorded blanks between programs and also cutting out commercials and other unwanted parts of a program being recorded.

Unattended program recording and wake-up playback

If you use the deck with an optional timer, you can record programs off your tuner unattended and wake up to music from the deck instead of being woken up by an alarm clock.

MIC/LINE mixing recording

You can mix the sound of a microphone with the sound of a program source such as a record or an FM program, and record the mixed sound.

PRECAUTIONS

HANDLING THE POWER CORD

- Always take hold of the plug to unplug it from the power outlet; do not unplug it by pulling on the cord. The cord may be damaged if you keep pulling on it.
- Do not handle the power cord with wet hands. This is extremely dangerous because you may get an electric shock.

PRECAUTIONS FOR USE

- Under no circumstances should the bonnet be removed, and the internal parts touched or modified in any way. Pioneer will not be held responsible in the event of a deterioration in performance or a breakdown if the cassette deck is modified in any way.
- Do not bring screwdrivers and other metal objects or magnets near the heads since you may damage and magnetize them.

KEEP THE HEAD SECTION CLEAN

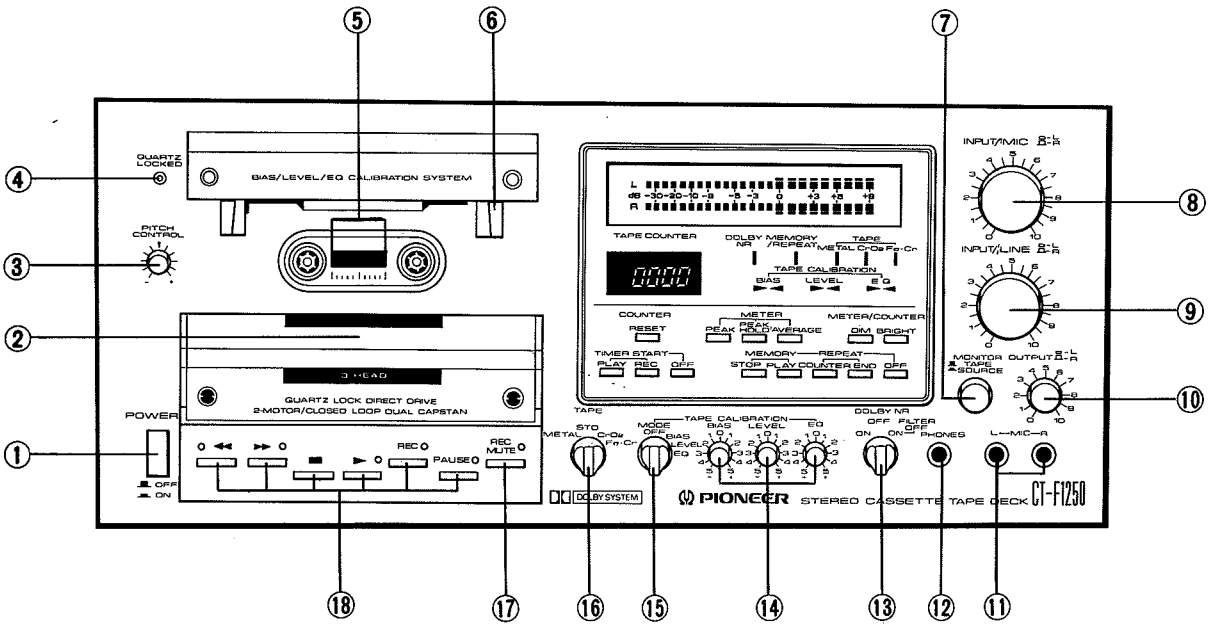
The heads, capstan and pinch roller get dirty very easily since they come in contact with the tape. For further details on cleaning the head section, refer to page 16 and the section on "MAINTENANCE."

Moisture forms in the operating sections of this model and the model's performance will be impaired if the model is brought from cool surroundings into a warm room or if the temperature of the room rises suddenly.
To prevent impairing performance, let the model stand in its new surroundings for about an hour before switching it on, or ensure that the room temperature rises gradually.

C-120 tapes can not be used with CT-F1250, since it may affect CT-F1250 adversely.

*Manufactured under license from Dolby Laboratories.
*Dolby and DD are trademarks of Dolby Laboratories.

FRONT PANEL FACILITIES



① POWER SWITCH

The power comes on when the POWER switch is depressed. The level meter and tape counter, and the remaining tape marker will then come on.

② DUST COVER

When you are not using the tape deck, always keep this cover in place to prevent dust and dirt from adhering to the head section and rotating parts.

③ PITCH CONTROL KNOB

You can use this knob to make the tape travel ±6% faster or slower than the rated tape speed during playback. When the knob is set to the central position (click-stop), the quartz PLL circuit is activated, the QUARTZ LOCKED indicator comes on, and the tape speed is quartz-locked to the rating (4.8 cm/sec.). When the knob is rotated counterclockwise, the speed drops and the musical steps are lowered. Conversely, when it is rotated clockwise, the speed increases and the musical steps are raised. The tape speed does not change during a recording.

④ QUARTZ LOCKED INDICATOR

When the PITCH CONTROL knob is set to its center position, the quartz PLL circuit is activated and this indicator comes on. It goes off, however, when the knob is rotated either clockwise or counterclockwise. During a recording, this indicator will remain on even if the PITCH CONTROL knob is rotated, and the quartz PLL circuit will be activated.

⑤ REMAINING TAPE MARKER

If this marker is visible, it means that there is enough tape remaining for several minutes of recording or playback.

⑥ CASSETTE TAPE GUIDE

⑦ MONITOR SWITCH

This switch is used to select the output signal which is made available at the output jacks and headphones. Since the indication of the level meter can be switched over at the same time, always make it a rule to depress this switch when adjusting the recording level (set to SOURCE position).

For playback: Set the switch to the released (TAPE) position. If it is set to the depressed position, you will not be able to hear the playback sound.

For recording: Set the switch to the released (TAPE) position and you will then be able to hear the signals (playback sound) immediately after you have recorded the sound source.
If the switch is set to the depressed (SOURCE) position, you will be able to hear the signals (recording input) immediately before you record the sound source.

⑧ MIC RECORDING LEVEL CONTROLS

Use these controls to adjust the recording level when you are recording with a microphone (or microphones). Use the front control for the left channel and the back control for the right channel.

⑨ LINE RECORDING LEVEL CONTROLS

These adjust the recording input level from the LINE INPUT terminals on the rear panel. The level increases as the controls are turned to the right. The front control is for the left channel and the back control for the right channel.

⑩ OUTPUT (PLAYBACK LEVEL) CONTROLS

Use these to adjust the output signal level during playback. Turning the controls to the right increases the level. The controls are coupled when turned but it is also possible to adjust the right channel (back) and the left channel (front) independently.
When playing back a reference tape (160 nwb/m), a reference playback level (0dB) is obtained with these controls set to the "6" click stop position.

⑪ MIC JACKS

These are the input jacks for microphone recording. Plug the left channel microphone into the L jack and the right channel microphone into the R jack.

⑫ HEADPHONE JACK

This is the output jack for your stereo headphones. You will be able to hear the sound from signals selected by the MONITOR switch. Use this jack when you want to monitor the quality of a recording or when you want to listen to a tape privately on the CT-F1250. Adjust the output level with the OUTPUT controls.

NOTES:

- *Use low-impedance headphones. If you use a high-impedance model, you will not be able to obtain sufficient volume.*
- *You will damage the microphone if you plug it into the HEADPHONE jack by mistake.*

⑬ DOLBY NR/MULTIPLEX FILTER SWITCH

Set this switch to DOLBY NR ON when recording with the Dolby NR system or when playing back a tape which has been recorded with the Dolby NR system.

Set this switch to the ON (filter ON) position when recording without the FM stereo broadcast pilot signal (19kHz).

ON ..... When playback in Dolby NR or when recording an FM stereo broadcast in Dolby NR using an FM tuner with MPX pilot signal leakage.

OFF..... When not recording or playback in Dolby NR.

ON FILTER OFF ..... When playback in Dolby NR or when recording a program source in Dolby NR other than an FM stereo broadcast, or when using an FM tuner with no MPX pilot signal leakage.

Refer to "Dolby NR system" on page 18 for details on Dolby, and to "Using the Dolby NR/Multiplex filter switch" on page 15 for details on how to use this switch.

⑭ TAPE CALIBRATION BIAS, LEVEL, EQ KNOBS

When adjusting the tape calibration, set the MODE selector to the BIAS, LEVEL and EQ positions in sequence, and at each position, adjust the tape calibration knobs (BIAS, LEVEL and EQ) so that both parts of the indicators (► and ◄) light up at the same time in a well-balanced fashion or flicker.

For details, refer to "HOW TO USE THE TAPE CALIBRATION" on page 10.

⑮ TAPE CALIBRATION MODE SELECTOR

When adjusting the tape calibration, set this selector to the BIAS, LEVEL and EQ positions in sequence. When you are not using tape calibration be sure to set the MODE selector to the OFF position.

For details, refer to "HOW TO USE THE TAPE CALIBRATION" on page 10.

⑯ TAPE SELECTOR

This selector allows the bias and equalizer characteristics to be selected during recording and the equalizer characteristics during playback in line with the type of tape you are using. For details, refer to "HOW TO USE THE TAPE CALIBRATION" on page 10.

METAL: For using metal tapes

STD: For using standard or LH tapes

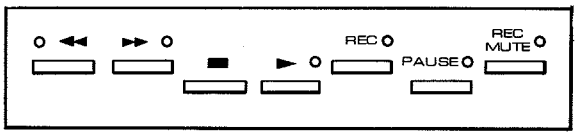
CrO_2: For using chrome tapes

Fe-Cr: For using ferrichrome tapes

⑰ REC MUTE BUTTON/INDICATOR

You can create unrecorded sound gaps, or blanks, while you are recording by depressing this button. When this button is depressed, the indicator winks at intervals of about one second. For details, refer to "Using the REC MUTE button" on page 15.

⑱ OPERATING BUTTONS



◄◄ (REW)..... Depress this button to rewind the tape. (The tape will travel at high speed from right to left.)

►► (FF)..... Depress this button to send the tape forward at top speed. (The tape will travel from left to right.)

■ (STOP)..... Depress this button to stop the tape run and to release the operating buttons.

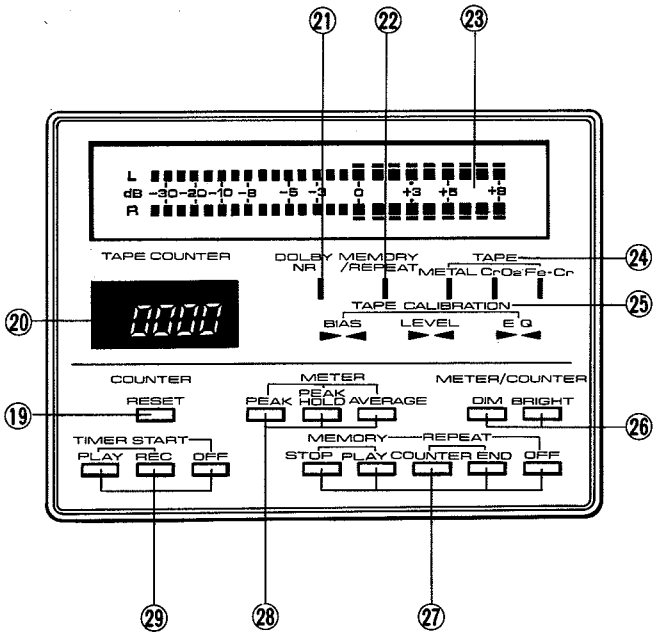
► (PLAY)..... Depress this button when play back a tape, and depress this button together with the REC button for recording. (The tape will travel from left to right.)

REC ..... Depress this button together with the PLAY button for recording.
This button will not work when a cassette is not loaded or when the erasure prevention tabs of a loaded cassette have been broken off.

PAUSE..... Depress this button to stop the tape temporarily during recording or playback. Depress it again to allow the tape to continue to travel as before.

NOTES:

- *When any of the operating buttons are depressed, the corresponding indicator (except STOP mode) will come on signifying that the deck is set to that respective mode.*
- *All the operating buttons are released (OFF) to stop mode when the POWER switch is turned OFF.*



⑲ COUNTER RESET BUTTON

Depress this button to reset the tape counter display to "0000."

⑳ TAPE COUNTER

This indicates the position of the tape run. The counter reverts to "0000" when the power is switched on.

㉑ DOLBY NR INDICATOR

This lights up when the DOLBY NR switch is set to ON.

㉒ MEMORY/REPEAT INDICATOR

This indicator comes on when the MEMORY/REPEAT switches are depressed, signifying that the deck is set to the respective mode.

㉓ LEVEL METER

This indicates the input level during recording and the output level during playback.

By operating the LEVEL METER switches, it can be made to function as a peak meter, a peak hold meter or as a level meter.

The input signal level is indicated. When the MONITOR switch is set to SOURCE, they indicate the input signal level, and when it is set to TAPE, they indicate the playback output level.

㉔ TAPE INDICATORS (METAL, CrO_2, Fe-Cr)

The indicator corresponding to the position of the TAPE selector lights up to indicate what type of tape is being used. There is no indicator for standard tapes.

㉕ TAPE CALIBRATION INDICATORS

The indicator corresponding to the type of tape calibration adjustment comes on. The bias, level and equalizer characteristics are optimum for the type of tape being used if both parts (▶ and ◀) of the indicators light up at the same time in a well-balanced fashion, or flicker, when the MODE selector is set to the BIAS, LEVEL and EQ positions in sequence. For details, refer to "HOW TO USE THE TAPE CALIBRATION" on page 10.

㉖ LEVEL METER/COUNTER BRIGHTNESS SELECTORS

Use this switch to select the meter/counter brightness.

DIM: Depress this switch at night or in dark locations when the existing meter/counter brightness is too high.

BRIGHT: Depress this switch when using the deck in daylight or other bright locations.

㉗ MEMORY/REPEAT SWITCHES

MEMORY STOP: Depress this switch and the tape will be rewound to that spot at which the tape counter was preset to "0000" during rec/play, when the REW button is depressed at any position you like.

PLAY: Depress this switch and the tape will be rewound to that spot at which the tape counter was preset to "0000" during rec/play, and playback will start from that spot, when the REW button is depressed at any position you like.

REPEAT COUNTER: Depress this switch when you want to play back a tape during playback or recording from the point at which the tape counter was set to "0000" up to the end of the tape.

END: Depress this switch when you want to play back a tape from the beginning to the end of that tape.

OFF: Depress this switch during normal tape playback or recording to release the MEMORY and REPEAT switches.

For further details, refer to "REPEAT PLAYBACK FUNCTION."

㉘ LEVEL METER SWITCHES

PEAK ..... When this switch is depressed, the meter functions as a peak meter, and the peak level of the signals is indicated for about 2 seconds.

PEAK HOLD ..... The meter functions as a peak level meter and the highest level of the signals is indicated when this switch is depressed.

AVERAGE ..... The meter functions as a level meter when this switch is depressed.

For further details, refer to "SETTING THE RECORDING LEVEL" on page 15.

㉙ TIMER START SWITCHES

Depress these switches when you are playing back or recording a tape with the use of a timer.

PLAY: When this switch is depressed, the deck will automatically be set to the playback mode at the preset timer time, and playback will begin. Use this switch for wake-up playback instead of an alarm clock.

REC: When this switch is depressed, the deck will automatically be set to the recording mode at the preset timer time, and recording will begin. Use this switch for recording FM programs when you are out of the house or otherwise occupied.

OFF: Always depress this switch when you do not intend to record or play back a tape using the timer (This will release the REC and PLAY switches of TIMER START).

CONNECTIONS

Connect the CT-F1250 terminals (OUTPUT—INPUT) to the tape terminals on the receiver (or stereo amplifier) with the accessory cords. The upper terminal is for the left channel and the lower for the right channel.

Connections for playback: connect the TAPE PLAY input terminals on the receiver to the CT-F1250's OUTPUT (PLAY) terminals.
Connections for recording: connect the receiver's TAPE REC output terminals to the CT-F1250's INPUT (REC) terminals.

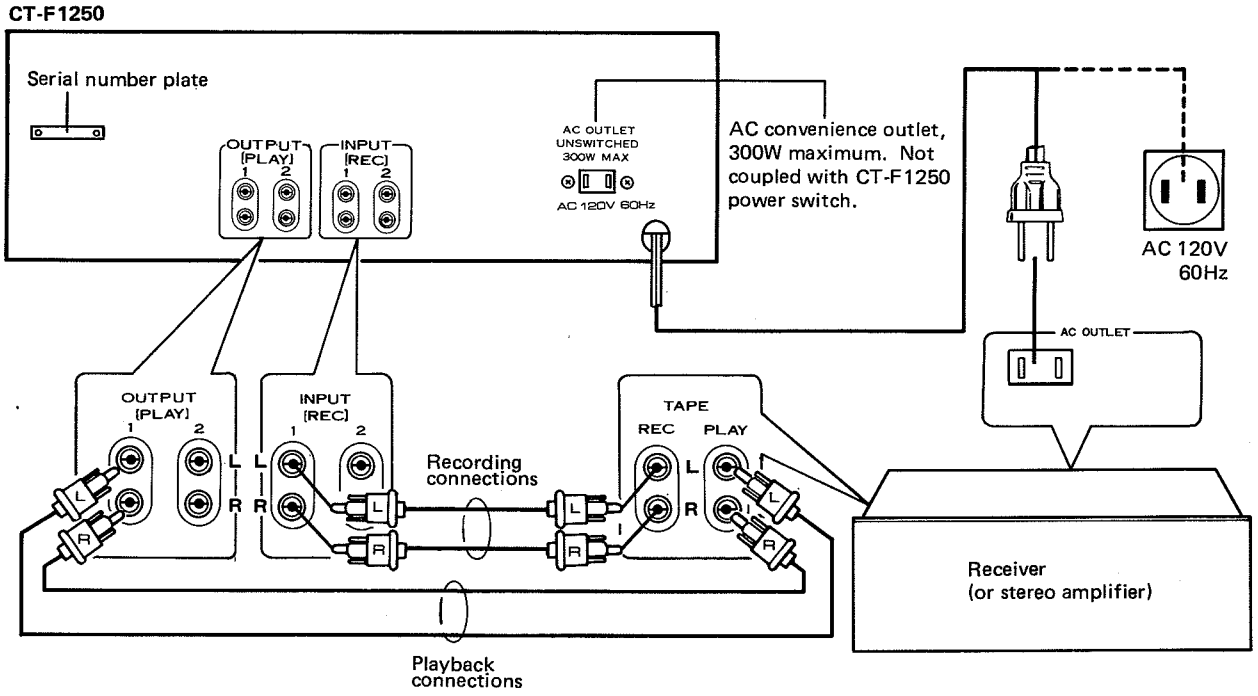


Fig. 1

INSTALLATION

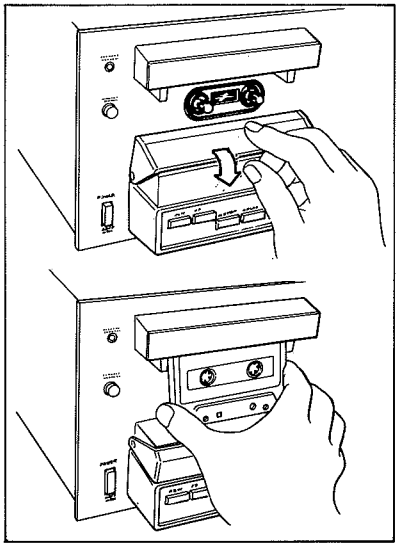
To ensure the best sound quality and trouble-free operation, avoid setting up the tape deck in any of the locations described below.

Location liable to downgrade performance and result in breakdowns	Resulting trouble
1. Locations exposed to direct sunlight, or near heaters or other heat sources.	1. External heat causes the performance of the electronic parts to deteriorate, and operation becomes unstable.
2. Locations with poor ventilation, or with high humidity or moisture contents, or dusty locations.	2. Cause of faulty contact in input/output terminals, and rust. High humidity and a high moisture content cause deterioration in insulation. There is also the danger of current leakage and heat generation in the circuit parts. Dust or grease in the rotating parts causes the parts to deteriorate.
3. Locations susceptible to vibration.	3. These locations affect the precision parts adversely.
4. Locations where there are thinners, benzine and other types of volatile liquids, insect sprays or any kind of inflammable objects at hand.	4. These help to corrode the front panel. In particular, the heads are precision-finished to micron dimensions. Chemicals may reduce their performance, so exercise all due care.

BASIC OPERATIONS

TAPE INSERTION

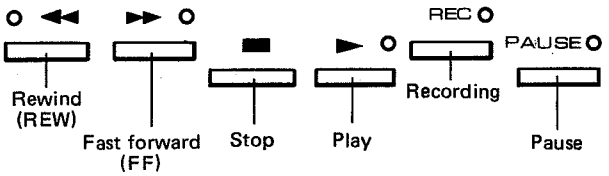
Place your forefinger on the edge of the dust cover and pull towards you.



Aligning the cassette tape with the guide, push upward and insert. When you want to remove the tape, pull it towards you.

NOTE:
Be sure not to take out cassette tape during tape running.

TAPE RUN



Play and record

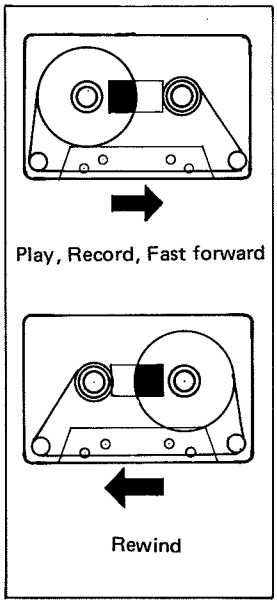
1. Check that the tape is on the left.
2. The tape runs from left to right when the ▶ button is depressed. If the REC button is also depressed together with the ▶ button, the deck will be set to the recording mode.

Fast forward

1. Check that the tape is on the left.
2. The tape runs from left to right at high speed when the ▶▶ button is depressed for a fast-forward operation.

Rewind

1. Check that the tape is on the right.
2. The tape runs from right to left at high speed when the ◀◀ button is depressed, and the tape is rewound.



NOTES:
- *You do not have to depress the ■ button when selecting the next mode with the CT-F1250.*
- *Do not depress more than one button at a time except when recording and for PAUSE mode.*

STOP OPERATION

Stopping the Tape

Depress the ■ button to stop the tape motion. The operating button indicators will go off.

Using the Pause Button

1. The tape will stop when the PAUSE button is depressed while the tape is traveling (recording or playback), and the PAUSE indicator will come on.
2. When the PAUSE button is depressed again, the tape will start traveling again (recording or playback).

NOTES:
1. *When stopping the tape for a prolonged period of time, use the ■ button.*
2. *When using a pre-recorded tape to re-record a program, bear in mind that the pre-recorded sound will sometimes not be erased at the place on the tape where you set the deck to the PAUSE mode.*

The PAUSE button comes in handy in the following instances:
- When the recording level is set.
- When you want to edit out some portions of a program during recording and then continue recording.

AUTO-STOP

The tape is automatically stopped by the auto-stop mechanism when the tape is completely wound onto one reel during each operating mode (recording, playback, fast forward, rewind) without the ■ button having to be depressed. When this mechanism is actuated, the operating button indicators will go off.

NOTE:
The auto-stop mechanism is actuated several seconds after the tape is fully rewound onto one reel.

Tape slack take-up mechanism

The CT-F1250 employs two capstans and so any slack in the tape will impair the effectiveness of their performance.
To safeguard against this kind of malfunction, the deck is provided with a tape slack take-up mechanism which eliminates any slack. What happens is that when the cassette tape is loaded, it sets the deck to take up the slack.
If, however, there is a great deal of slack, use a pencil or similar object to take it up before you load the cassette tape (refer to page 9).

CASSETTE TAPES

Cassette tapes are manufactured according to international standards governing their construction, and they are generally classified according to their tape performance and recording time.

Performance classifications

Table 1

Standard type	Low-noise type	High-performance type
• Standard tape • Dynamic tape	• Low-noise tape • Low-noise, high-output tape	• Chrome tape • Ferrichrome tape • Metal tape

Recording time classifications

Table 2

Cassette tape designation	Recording time (minutes)	
	One side	Both sides
C-30	15	30
C-46	23	46
C-60	30	60
C-90	45	90
C-120	60	120

The size of the cassette tapes is the same but their playing (and recording) times differ according to the tape thickness (length).
The C-60 and C-90 tapes are most commonly used.

C-120 tapes can not be used with CT-F1250, since it may affect CT-F1250 adversely.

CHECK CASSETTE BEFORE USE

Slack or protruding tapes

If the tape protrudes from the cassette as shown in Fig. 2 or is slack, the tape may run without passing through between the capstan and the pinch roller and so may be damaged. Take up the slack by inserting a pencil through the reel hub and turning it as indicated in the figure.
Some tapes provide a tape stopper to prevent tape slack. Make sure that you remove the tape stopper before inserting the tape into the deck.

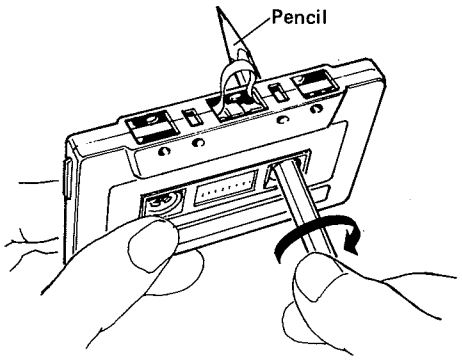


Fig. 2

Erasure prevention tabs

Cassette tapes are provided with erasure prevention tabs, as shown in Fig. 3, which act as a protection device to prevent the accidental erasure of a recording which you want to keep. If you remove the tabls, as shown in Fig. 3, with a screwdriver, you will be able to prevent erasure if you accidentally set the CT-F1250 to the recording mode by depressing the REC button.
To re-record, cover the tab opening with a double layer of adhesive tape (Fig. 4).

NOTE:
Cassette tapes are provided with two tabs (A or 1 and B or 2) so you can protect the recordings on both sides.

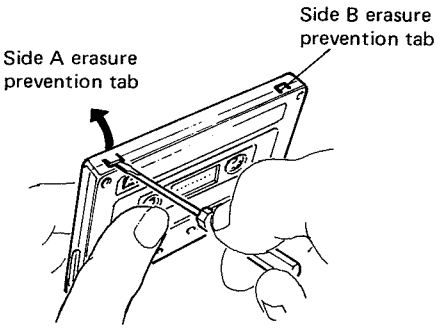


Fig. 3

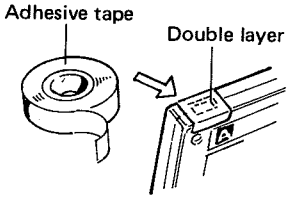


Fig. 4

HOW TO USE THE TAPE CALIBRATION

A number of different types of tape are sold on the market and each has its own characteristics. In order to do full justice to the performance of the tape you have chosen, and to obtain recording and playback with the minimum of distortion, set the TAPE selector to the position that corresponds to your tape.

Also, remember that even the same brand and same model tape will have slight variations and differences in the tape characteristics. To overcome them, this deck is provided with a tape calibration system. This allows you to adjust the tape characteristics to their optimum value and thereby make the most of the tape's performance.

USING TAPES AT THEIR STANDARD VALUES

The standard values, in reference to the characteristics of a tape, denote the standard bias and equalizer values of that type of tape. Proceed as follows when using the tapes at their standard values.

1. Load the tape you have chosen into the deck.
2. Set the TAPE selector to the position corresponding to the type of tape. Refer to the table which is inserted into this operating instructions.
3. Set the tape calibration MODE selector to the OFF position.

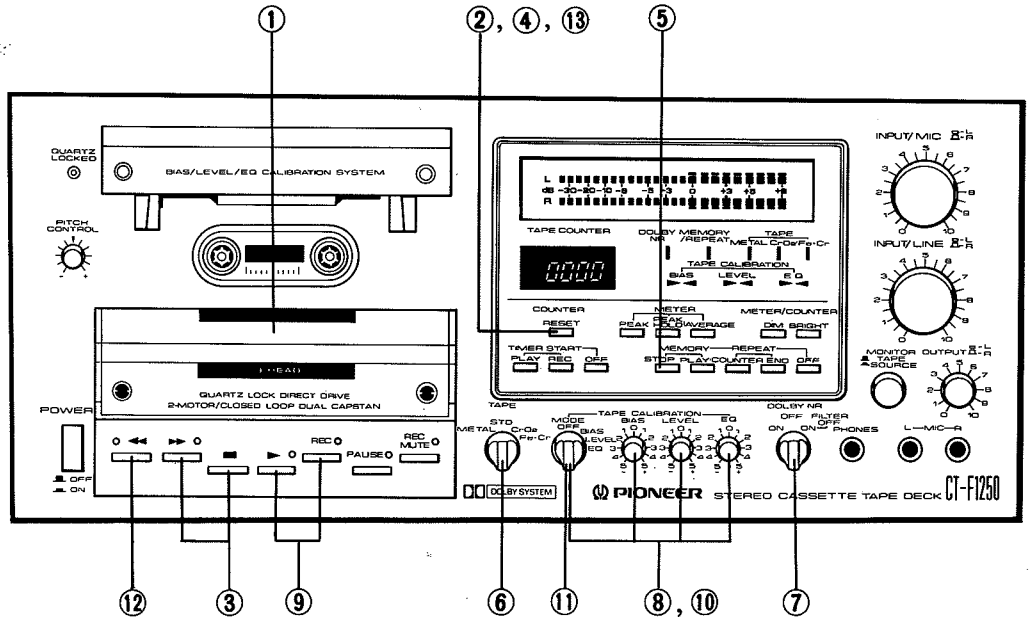
You have now set the deck to accommodate the standard values of the tape.

BEFORE PROCEEDING WITH THE TAPE CALIBRATION

The tape must meet the following conditions so that the tape characteristics are detected and adjusted.

- First remember that the recorded content is erased while the adjustment is being performed. Use a new tape or one whose recorded content may be erased. It must be possible to set the detection intervals on the tape.
- Make sure that the erasure prevention tabs on the cassette tape have not been broken out (in other words, it must be possible to record on the tape).

Follow the Tape calibration procedure below in numerical order. The step numbers are illustrated in the figure.



TAPE CALIBRATION PROCEDURE

1. Select the cassette tape for calibration and load it into the deck.
2. Depress the COUNTER RESET button and set it to "0000".
3. Depress the ▶▶ button, allow the tape to run until the counter registers "0050" and then depress the ■ button.
4. Depress the COUNTER RESET button again and set it to "0000".
5. Depress the MEMORY STOP button.
6. Set the TAPE selector to the position corresponding to the type of tape being used.
   For details, refer to the table which is inserted into the operating instructions.
7. Set the DOLBY NR selector to OFF.
8. Set the tape calibration MODE selector and knobs as follows:
   - Set the MODE selector to OFF.
   - Set the BIAS/LEVEL/EQ knobs to the central click position.
9. Depress the REC and PLAY buttons together.
10. Set the tape calibration MODE selector and knobs as per the table below.
11. Set the MODE selector to the OFF position.
    This now completes the tape calibration adjustments.

NOTE:
When returning the MODE selector to the OFF position after the tape calibration adjustments have completed, either of the BIAS indicators may be turned off. But, there is no need to readjust the tape calibration, since it has been completed in the above steps.

12. Depress the ◀◀ button. The tape is now rewound to a position corresponding to the "9999" or thereabouts display on the counter which was where the adjustments were begun.
13. Depress the COUNTER RESET button again and set to "0000". Begin recording by following the "Recording" on page 14.

Operate the tape calibration controls when recording. For playback, simply select the TAPE selector — there is no need for adjustments.

TAPE CALIBRATION MODE SELECTOR AND KNOBS OPERATION

The marks in the table indicate as follows:
▷: Indicator ON, ▶: Indicator Winking, ▶: Indication OFF.

Step	MODE selector	BIAS/LEVEL/EQ knobs	Indicator display
1	BIAS position	Rotate BIAS knob counterclockwise to minimum position..	BIAS (or BIAS) ▷◀ ▶◀
2	BIAS position	Rotate BIAS knob clockwise to maximum position.	BIAS ▶◁
3	BIAS position	Rotate BIAS knob counterclockwise and set where left and right indicators light up simultaneously in a well-balanced fashion, or wink.	BIAS or BIAS ▷◁ ▶◁ BIAS adjustment is now complete.
4	LEVEL position	Adjust LEVEL knob and set where left and right indicators light up simultaneously in a well-balanced fashion, or wink.	LEVEL or LEVEL ▷◁ ▶◁ LEVEL adjustment is now complete.
5	EQ position	Adjust EQ knob and set where left and right indicators light up simultaneously in a well-balanced fashion, or wink.	EQ or EQ ▷◁ ▶◁ EQ adjustment is now complete.

HOW TO CALIBRATE THE TAPES

It sometimes happens that, depending on the type of tape used, even when the tape calibration operation has been performed, the adjustment is not effective. This may be due to tape damage or to fluctuations in the tape's characteristics. In cases like this, proceed as follows.

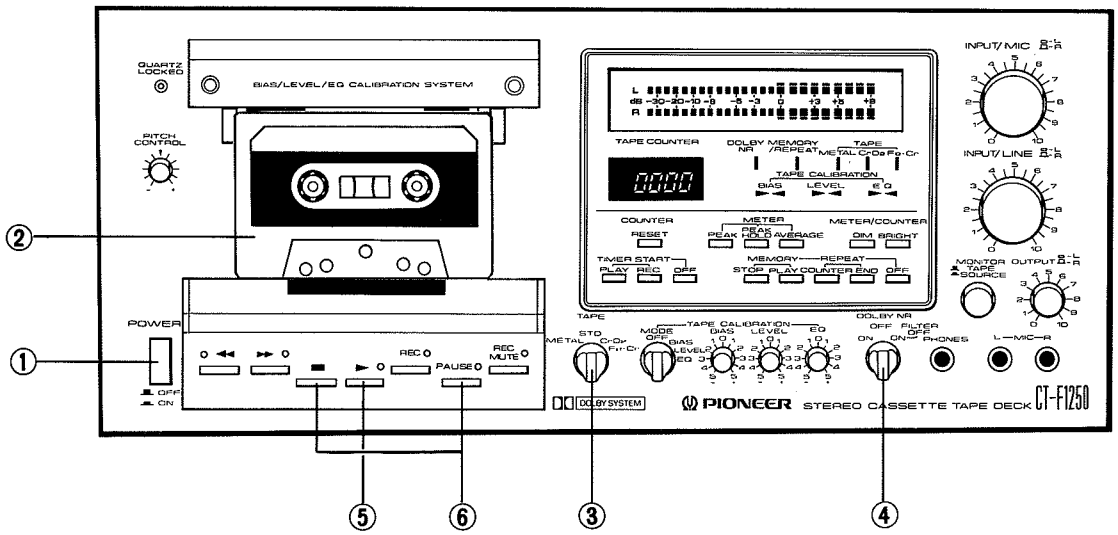
1. If the equalization adjustment is not effective after the bias and level have both been adjusted, keep the MODE switch at the EQ position, adjust the BIAS knob from the position of its original setting and set so that the EQ display lights at the left and right.
   Take care with this adjustment since if it is performed excessively, the characteristics may be impaired.
2. If adjustment has not been effective in step 1. or if adjustment has not been possible in another mode, set the BIAS, LEVEL and EQ knobs to their center click stop position.
   This is the standard position for all the various tapes.

PLAYBACK

Follow the playback procedure below in numerical order. The step numbers are illustrated in the figure.

Set the switches and controls as follows before you switch the power on.

- Depress the MEMORY REPEAT-OFF switch.
- Depress the TIMER START-OFF switch.
- Depress the METER-AVERAGE switch.
- Depress the COUNTER RESET button.
- Set the MONITOR switch to TAPE.
- Set the PITCH control knob to the central position.
- Set the OUTPUT controls to the "6" position.
- Check that the head section is not dirty. If dirty, clean it.
- Set the stereo receiver's power switch and the TAPE MONITOR switch to ON to enable tape playback.



1. Set the POWER switch to ON.

2. Insert the cassette tape.

Check that the tape is on the left reel and then insert the cassette tape (Refer to page 8).

3. Select the TAPE selector position.

If you have loaded a metal tape into the deck, set this selector to METAL. Set to Fe-Cr for a ferrichrome tape, to STD for a standard tape and to CrO_2 for a chrome tape. For details, refer to the table which is inserted into the operating instructions.

4. Set the DOLBY NR switch.

Set this switch to ON when playing back a tape, which was recorded by the Dolby NR system. For further details on the Dolby NR system, refer to page 18.

5. Start playback.

Depress the ► button and the tape will start to run. Adjust the volume to the preferred level by rotating the OUTPUT control on the CT-F1250, and the volume control on the stereo receiver.

6. Complete playback.

The tape will stop when it has been wound onto the right reel, and the Play indicator will go off.

Depress the ■ button when you want to stop the tape run during playback. Depress the PAUSE button for a temporary stop.

NOTE:
The CT-F1250 can be set up for automatic repeat tape playback. Refer to "REPEAT PLAYBACK FUNCTION" on the next page for details.

OUTPUT LEVEL CONTROLS

These controls are used to adjust the output signal level when a tape is being played back and also the volume level of headphones. Turning the controls to the right increases the level. The controls are coupled when turned but it is also possible to adjust the right channel(back) and the left channel (front) independently.

Since these controls are coupled to the level meter, it is possible to adjust the indication of the meter so that it corresponds with the recording level—whether high or low—when the pre-recorded tape is played back.

When these controls are set to their click-stop positions and a tape is played back, the regular playback level is indicated by a meter display of 0dB. This function allows you to check the difference in sensitivity between your various tapes and also to check the signal level especially when playing back or recording a tape with the Dolby NR switch at ON.

REPEAT PLAYBACK FUNCTION

REPEAT SWITCHES

These switches enable you to listen repeatedly to tape playback.

REPEAT/COUNTER SWITCH

1. Depress the REPEAT/COUNTER switch.
2. Depress the COUNTER/RESET button at the start of the program during playback or when recording which you want to hear repeatedly, and set the tape counter to "0000."
3. When the tape is fully wound on to the right reel, it will automatically be rewound about two seconds later.
4. The tape will be rewound as far as the "9999" indication or thereabouts on the tape counter.
5. The tape will now automatically start to play back.

REPEAT/END SWITCH

1. Depress the REPEAT/END switch.
2. The tape now plays back (or records).
3. The tape will be rewound automatically about two seconds after it has been wound onto the right reel.
4. The tape will be rewound to the starting point.
5. The tape will now start to play back automatically.

- The tape will continue to be played back repeatedly until the MEMORY-REPEAT/OFF switch is depressed.

MEMORY SWITCHES

There are two MEMORY switches (MEMORY/STOP and MEMORY/PLAY). The MEMORY/STOP switch serves to rewind a tape during playback or recording as far as the preset "9999" indication or thereabouts on the tape counter and to stop the tape run. The MEMORY/PLAY switch serves to start the tape playback from the "9999" indication or thereabouts on the tape counter automatically.

MEMORY/STOP SWITCH

1. Depress the MEMORY/STOP switch.
2. Depress the COUNTER RESET button at that place on the tape during playback or recording which you want to re-record or re-play again, and set the tape counter to "0000."
3. Depress the ◀◀ switch once the playback or recording is completed.
4. The tape will be rewound and it will stop at the tape indication of "9999" or thereabouts.

MEMORY/PLAY SWITCH

1. Depress the MEMORY/PLAY switch.
2. Depress the COUNTER RESET button at that place on the tape during playback or recording which you want to be played back again later, and set the tape counter to "0000."
3. Depress the ◀◀ button once the playback or recording is completed.
4. The tape will be rewound and it will stop at the tape counter indication of "9999" or thereabouts.
5. The tape will automatically start playing back.

NOTE:
Always depress the MEMORY-REPEAT/OFF switch to release the MEMORY/STOP and MEMORY/PLAY functions.

OPERATING NOTES

- If you set the MEMORY PLAY or the REPEAT COUNTER switches to on and then set the deck to the rewind mode with the tape counter display indicating "9999" or thereabouts, the deck will be automatically set to the repeat end mode (whereby the tape is played back automatically after it has been wound up) immediately after the tape has been wound up. This does not indicate a failure.

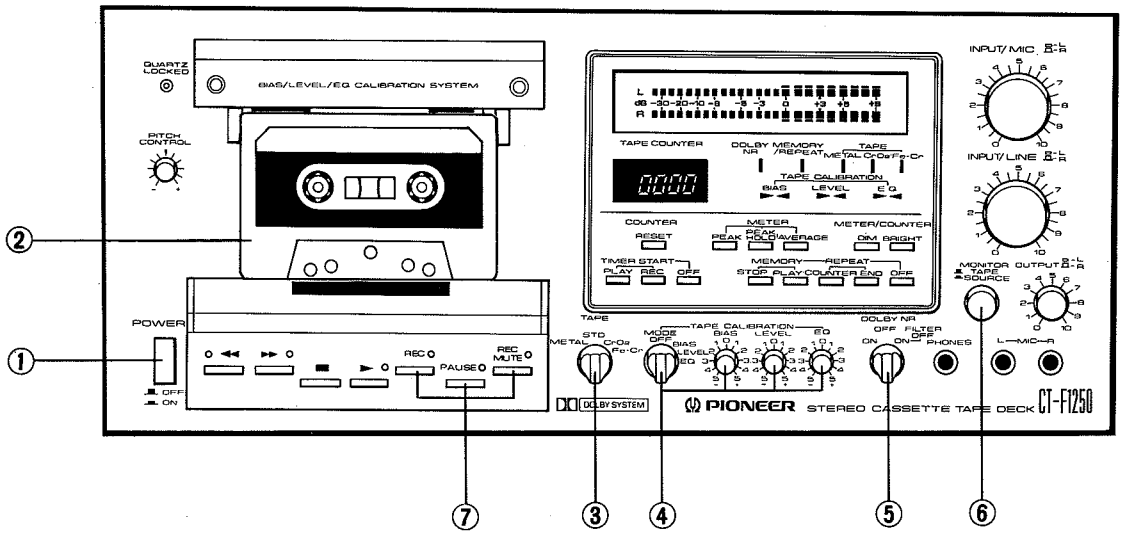
  When you set the deck to the stop mode upon completion of the rewind operation under these circumstances, set the MEMORY/REPEAT switch to OFF.
- During the repeat counter operation (whereby the tape is automatically set to the repeat playback mode) the portion of the tape with the start of the program will shift slightly forward. This is due to the inertia of the tape itself and is not a failure.

RECORDING

Follow the recording procedure below in numerical order. The step numbers are illustrated in the figure.

Set the switches and controls as follows before you switch the power on.

- Depress the MEMORY REPEAT-OFF switch.
- Depress the TIMER START-OFF switch.
- Depress the METER-AVERAGE switch.
- Set the MONITOR switch to TAPE.
- Set the INPUT-MIC and LINE controls to the leftmost "0" position.
- Inspect the head section for dirt. If dirty, clean it. (Refer to page 16.)
- Set up the program source (records, FM broadcast, microphone performance, etc.) which you intend to record.



1. Set the POWER switch to ON.

2. Insert the cassette tape.

Check that the tape is on the left reel. Also check that the cassette tape's erasure prevention tabs (refer to page 9) have not been broken off and then insert the cassette tape (refer to page 8).

3. Select the TAPE selector position.

If you have loaded a metal tape into the deck, set this selector to METAL. Set to Fe-Cr for a ferrichrome tape, to STD for a standard tape and to CrO_2 for a chrome tape. For details, refer to the table which is inserted into the operating instructions.

4. Adjust the TAPE CALIBRATION system.

Refer to "HOW TO USE THE TAPE CALIBRATION", and adjust the tape characteristics (bias and equalizer) to the optimum values to make the most of the tape you are using.

5. Set the DOLBY NR selector.

Set this selector to ON for recording using the Dolby NR system. (Refer to page 18.)

6. Set the MONITOR switch to SOURCE.

7. Stand by for recording.

Depress the PAUSE button first, and then the ► and REC buttons together. Release the PAUSE button, allow the tape to run for about 5 seconds and then depress the PAUSE button again if you want the leader tape to run free of the heads.

8. Set the recording level.

Refer to "Setting the recording level" on the next page and then set the controls.

9. Start recording.

First depress the COUNTER RESET button and set the tape counter to "0000."
Then release the PAUSE button, start the performance of the program source, and start recording.

10. Monitoring the recording.

If you set the MONITOR switch to TAPE, you can listen and compare the sound quality with that when the same switch is set to SOURCE. If there is anything wrong with the sound when the switch is at TAPE, it may be due to a deformed tape, dirt in the head section, or the recording level or TAPE CALIBRATION system may be adjusted incorrectly. Locate the fault and start recording again.

11. Complete recording.

When the recording is completed, depress the STOP button and stop the tape. Depress the PAUSE button to stop the tape temporarily. The auto-stop mechanism will be automatically actuated when the tape is fully wound onto the right reel during recording.

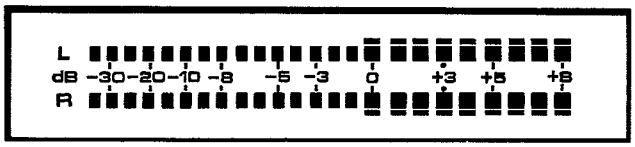
- Never operate any of the switches except the monitor switch during recording.

SETTING THE RECORDING LEVEL

If you record a program source at a recording level which is unsuitable, the signal-to-noise ratio of the playback sound will deteriorate and the distortion will increase. Set the level according to the following procedure and safeguard against poor recordings.

1. Depress the METER-PEAK or PEAK HOLD switch.
2. Adjust the INPUT (MIC or LINE) controls so that the meter indication does not continuously go beyond +5dB (This indication is +8dB with metal tapes).

- Depress the AVERAGE switch, and the level meters display the average value of the input signals.
- If you record a sound source when the meter indication exceeds full scale, the playback sound will be distorted. Conversely, if the meter indication is too low (−30dB to −20dB), the signal-to-noise ratio will deteriorate and you will hear a great deal of noise when you play your recording back.
- The signal level will fluctuate widely according to the program source, and so keep observing the meter indication while you are recording.



USING THE MONITOR SWITCH

The CT-F1250 adopts an independently aligned erase/recording/playback 3-head system. If you set the MONITOR switch to TAPE during a tape recording, you can listen to the program which you have just recorded. If you set this switch to SOURCE, you can listen to the program which you are about to record. This means that by selecting the switch, you can monitor the recording through the headphones. Set the stereo receiver's TAPE MONITOR switch to ON when monitoring a recording from a stereo receiver connected to the CT-F1250.

USING THE DOLBY NR/MULTIPLEX FILTER SWITCH

A 19kHz pilot signal and 38kHz subcarrier are included in the signals transmitted by an FM stereo broadcast station.

Some FM tuners tend to be susceptible to the leakage of the FM stereo pilot signal and this has an adverse effect on the Dolby characteristics. Set this switch to ON when recording a program using the Dolby noise reduction system. For all other recordings, set the switch to OFF So as to avoid the negative effects of the filter characteristics, the frequency band is widened and it is possible to record programs with a high level of fidelity to the original source.

USING THE REC MUTE BUTTON

This handy button is used to cut out commercials when you are recording programs (FM) off the air, to create unrecorded sound sections between programs, and to eliminate the clicking noise made when the stylus descends onto the record with a disc recording.

When creating unrecorded sound sections between programs, depress this button for about 5 seconds after one program has finished, and depress the PAUSE button while the button is depressed. Once the tape has come to a halt, release the REC MUTE button. The program source sound will be heard through the speakers during the recording but there will be no recording of the sound.

Depress the PAUSE button immediately before the part of the program you do not want to record and then again immediately before the next program begins. Now continue with recording again.

If you are recording a program off a disc, depress the REC MUTE button when the stylus descends onto the lead-in groove of the disc and release it immediately before play.

ERASING RECORDED SOUND

- When you want to completely erase a program source which you have recorded, set the MIC, LINE recording level controls to their leftmost positions and then allow the tape to run with the tape deck set to the recording mode.
- If you re-record a new program source onto a pre-recorded tape, the previous recording will be erased automatically, and the new program source will be recorded.

MICROPHONE RECORDING

STEREO RECORDING

As shown in Fig. 5, use a stereo microphone or two identical microphones and connect the one for the left channel to the MIC L jack and the one for the right channel to the R MIC jack. For the actual recording, refer to page 14 and "Recording."

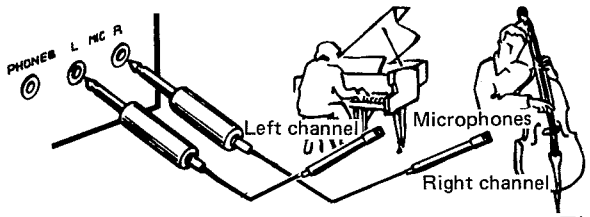


Fig. 5

Points to bear in mind

- Use dynamic or electret microphones.
- Make sure that the connecting cord for a high-impedance microphone is less than 5 meters long.
- Monitoring the recording with the speakers very often gives rise to howl so use the microphones as far away as possible from the speakers. There will be no howl, however, with headphones.
- You may damage the microphone if you plug it into the HEADPHONE jack by mistake.

MIXING RECORDING

Mixing recording can be performed between the signals from the INPUT (REC 1, 2) terminals and the signals from the MIC jacks.

1. As shown in Fig. 5, connect the microphones to the MIC jacks, and connect the program source, such as the turntable, through the receiver to the CT-F1250's INPUT (REC 1, 2) terminals.
2. Adjust the mixing levels by setting the MONITOR switch to SOURCE, and setting the LINE recording level control knobs, all the while monitoring the levels through the headphones (or speakers). Use the MIC recording level controls to adjust the signals from the LINE recording level controls to adjust the line input signals.
3. For recording, follow the procedure outlined on page 14 and the section on "RECORDING."

NOTES:

1. *Set the recording level controls not used for mixing at their lowest level (turn right round to the left).*
2. *You will obtain much better results with mixing if you turn the LINE recording level controls down slightly rather than if you use the microphones or line input independently.*

MAINTENANCE

Follow the maintenance instructions below to keep your deck working in tip-top condition.

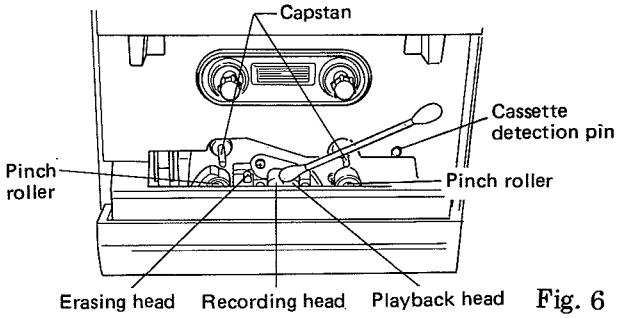


Fig. 6

CLEANING THE HEAD SECTION

Fig. 6 shows that the head section is composed of the heads, capstan and pinch rollers, and with extended use these parts accumulate dust, dirt and grease easily as the tape runs.

If this assembly gets dirty, the contact between the tape and the surface of the heads is impaired and this downgrades the sound quality and stereo balance, and it also leads to unstable operation. To prevent this, clean the head section and the surrounding parts regularly with the cleaning swabs or with a soft cloth dipped in the cleaning fluid commercially sold in the market.

You will find that it is easier to clean the pinch roller if you depress the cassette detection pin and the ► button. After the cleaning, depress the ■ button to bring the mechanism to a stop.

NOTE:
When the cassette detection pin is depressed, the tape slack take-up mechanism will be actuated. This does not indicate a failure so continue to clean the pinch roller.

CLEANING THE FRONT PANEL, DUST COVER

Use a soft cloth to wipe off dust and grease from the front panel and dust cover. When these parts are very dirty, dip the soft cloth in a small amount of neutral cleanser, remove the dirt and wipe with a dry cloth. Never use volatile spirits like thinners, benzine or alcohol because they will damage the panel's finish.

DEMAGNETIZING THE HEADS

The recording head becomes magnetized when you use the tape deck for prolonged periods of time. This results in noise being generated and the treble dropping off during recording and playback. The recording head should therefore be regularly demagnetized with the head eraser, which is sold separately. For further details, refer to the head eraser's instructions booklet.

OPERATIONS WITH THE TIMER

UNATTENDED RECORDING

If you use an optional timer, you will be able to automatically record an FM broadcast or other program source at a specified time. This is convenient for recording programs when you are out or asleep.

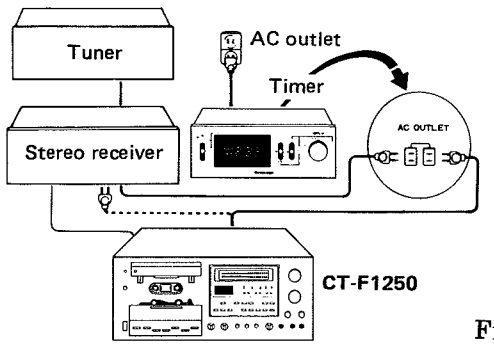


Fig. 7

1. As shown in Fig. 7, connect the CT-F1250's power cord to the timer. At the same time connect the power cord of the stereo component (receiver, or tuner and amplifier, etc.) which is connected to the CT-F1250 so that the power ON/OFF functions of that component are controlled by the timer.
2. Set the power switches of the CT-F1250 and stereo component to ON, and select the broadcasting station whose program you want to record.
3. Follow steps 1 to 9 in the section on "RECORDING" on page 14 and set the recording level. Rewind the tape back to the point at which you want to start recording.
4. Set the timer so that the power will come on at the prescribed time. The power to the other stereo components goes off.
5. Depress the TIMER START-REC switch.
6. At the prescribed time the power will automatically go on, and the REC and PLAY button indicators will light up about three seconds later. Recording will then commence. When the tape is completely wound onto the reel, the auto-stop mechanism is actuated and the tape is stopped. Next, the timer operates and switches the power to the CT-F1250 and the stereo component off.

- *Turn the receiver's volume control right down so that the sound is not heard through the speakers while you are out.*
- *For more details on the connections, refer to the timer's instructions booklet.*
- *Set the time on the timer so that the power to the CT-F1250 and stereo component goes off after the tape is fully wound onto the right reel.*

WAKE-UP PLAYBACK

You can have the CT-F1250 to play back a prerecorded tape automatically at a desired time. You can set the timer so that the tape's music wakes you up instead of an alarm clock.

1. As shown in Fig. 7, connect the CT-F1250.
2. Follows steps 1 to 5 in "PLAYBACK" on page 12, and set up the CT-F1250. Rewind the tape back to the point at which you want to start playback.
3. Set the timer so that the power is switched on at the desired time.
4. Depress the TIMER START-PLAY switch.
5. At the prescribed time the power will come on, the PLAY button indicator will light up about 3 seconds later, and the tape will start to play back.

HOW TO USE LINE TERMINALS

Simultaneous recording

The CT-F1250 is provided with two sets of INPUT terminals. As shown in Fig. 8, this means that you can connect another tape deck (cassette, or open-reel) to the INPUT (REC) terminals and record the same program source which you are recording on the CT-F1250.

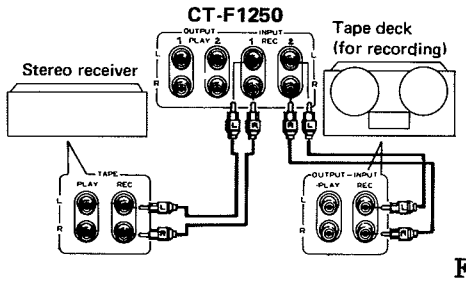


Fig. 8

Duplicating

The CT-F1250 is equipped with two sets of OUTPUT terminals. As shown in Fig. 9, this means that if you connect one set to the recording INPUT (REC) terminals on your tape deck (cassette, or open-reel), you can record the program of your choice at the same time as the program source is being played back on the CT-F1250. In other words, you can duplicate tapes.

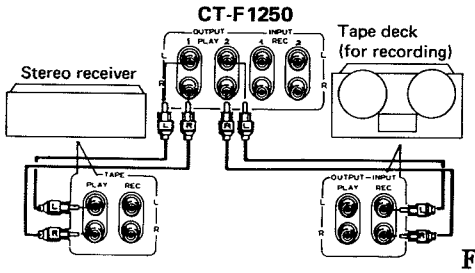


Fig. 9

THE DOLBY NR SYSTEM

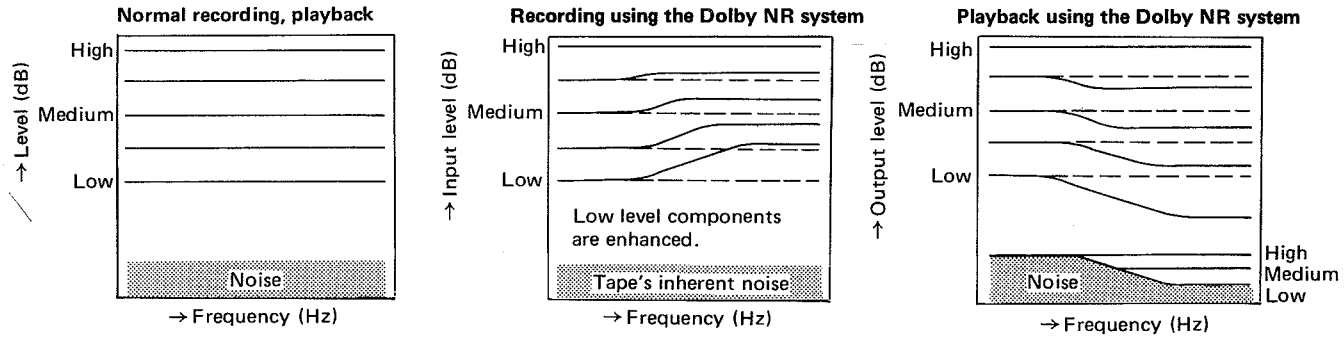
A cassette tape travels at one quarter of the speed of an open-reel (19cm/sec, 4-track) tape, and its track width is only 60 percent in comparison. The cassette tape is thus clearly at a disadvantage with respect to the signal-to-noise ratio.

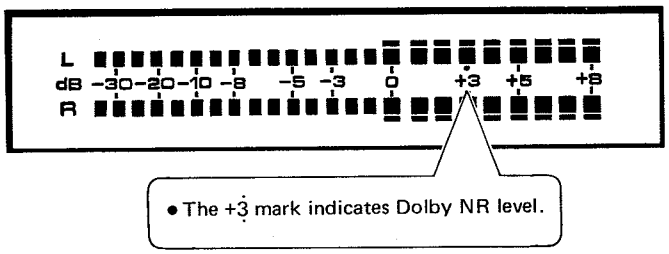
The Dolby NR system is designed to reduce the noise called hiss which is inherent in tapes, and it is effective in upgrading the signal-to-noise ratio. It is so effective, in fact, that it is now indispensable to cassette decks.

The basic principle of the Dolby NR system is as follows: when signals with a relatively low level are recorded, the Dolby NR circuitry enhances the signals in the high-frequency range which has most of the hiss components, and these signals are then recorded. When they are played back, the circuitry attenuates only those components which were enhanced during recording. This returns the signal components to the normal level, and the hiss is reduced (by a maximum of 10dB) during playback only for that level which was attenuated. When the signal is relatively high level, the S/N ratio is sufficient and so the operation of the Dolby NR system is not necessary. The Dolby NR system operates automatically in accordance with the signal level, as shown in the figure. Furthermore, if the Dolby NR system is used for recording, the recording level can be set relatively low which enables almost distortion-free good sound quality tape recordings.

Operating precautions

- The adjustment of the recording level is basically the same as when the Dolby NR system is not used.
- In order to make the most of the effect of the Dolby NR system, choose a program source with as little noise as possible.
- If you have used the Dolby NR system to record a program, make sure that you use it when playing the same program back.
- Playing back a normally recorded tape with the Dolby NR system and playing back normally a tape which was recorded by the Dolby NR system will result in an unnatural reproduction of the sound on the tape.





SPECIFICATIONS

Systems . . . . . Compact cassette, 2-channel stereo
Motors . . . . . Capstan drive; Quartz PLL DD motor x 1
Reel drive; DC high torque motor x 1
Heads . . . . . Ferrite recording/playback combination type head x 1
Erasing head x 1
Fast Winding Time. . . . . Approximately 85 seconds (C-60 tape)
Wow and Flutter . . . . . No more than 0.03% (WRMS)

Frequency Response
–20dB Recording :
Standard, LH tapes . . . . . 20 to 18,000Hz (25 to 16,000Hz ± 3dB)
Ferrichrome tape. . . . . 20 to 20,000Hz (25 to 17,500Hz ± 3dB)
Chromium dioxide tape . . . . . 20 to 19,000Hz (25 to 17,500Hz ± 3dB)
Metal tape . . . . . 20 to 20,000Hz (25 to 18,500Hz ± 3dB)
0dB Recording :
Chromium dioxide tape . . . . . 20 to 12,000Hz
Metal tape . . . . . 20 to 14,500Hz
Signal-to-Noise Ratio . . Dolby NR OFF; More than 59dB
Dolby NR ON; More than 69dB (over 5kHz)

Harmonic Distortion . . . . . No more than 1.0% (0dB)
Inputs (Sensitivity/Maximum allowable input/Impedance)
MIC (L, R); 0.3mV/100mV/30 kilohms, 6mm diam. jack (Reference MIC impedance; 250 ohms to 10 kilohms)
LINE x 2; (60mV/25V/50 kilohms) Pin jack
Outputs (Reference level/Maximum level/Load impedance)
LINE x 2; (450mV/640mV/50 kilohms) Pin jack
HEADPHONES x 1; 63mV/90mV/8 ohms, 6mm diam. jack
Semiconductors . . . . . Transistors x 139
Diodes x 125, (Zener; 9, LED; 18)
ICs x 22

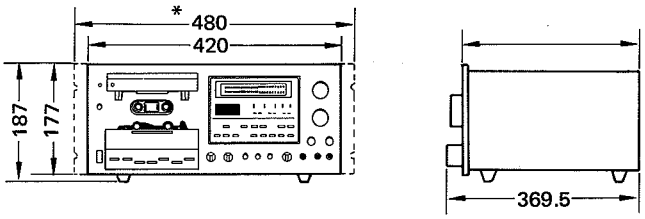
Subfunctions
- Dolby NR system (ON/OFF) with LED indicator lamp
- Tape selector with 4 positions (METAL/STD/CrO_2/Fe-Cr).
- Tape calibration function
- Memory stop/Memory play function
- Counter repeat/End repeat
- Auto start/Auto stop
- Fluorescence tube level meter (–30 to +8dB) (Peak/Peakhold/Average selector)
- 4-digit Fluorescence tape counter
- Automatic tape slack canceller
- Pitch control (±6%) Play position only
- REC muting function
- Mixing control used for MIC and LINE inputs
- Level meter and Tape counter brightness selectors
- Cassette compartment illumination (Remaining tape marker)
- Output level controls with click-stop for reference playback level

Power Requirements . . . . . AC 120V 60Hz
Power Consumption . . . . . 59 watts
Dimensions . . . . . 420(W) x 187(H) x 369.5(D)mm Max. 16-9/16 x 7-3/8 x 14-1/2 in.
Weight. . . . . 10.9kg (24 lb)
Furnished parts. . . . . Stereo connecting cords with pin plugs x 2

Operating instructions x 1

NOTE:
Specifications and the design subject to possible modification without notice due to improvements.

NOTES:
1. Reference Tapes: Standard & LH: DIN 45513/BLATT6 or equiv.
: CrO_2 : DIN 45513/BLATT7(CrO_2) or equiv.
2. Reference Recording Level: Meter 0dB indicating level (160 nwb/m magnetic level = Philips cassette reference level)
3. Reference Signal: 333Hz
4. Wow & Flutter: • JIS [3kHz, with acoustic compensation (weighted), rms value]
5. Frequency Response: • Measured at –20dB level, DOLBY NR OFF, level deviation is ±6dB without indication.
6. Signal to Noise Ratio: • Measured at the third harmonic distortion 3% level, weighted.
7. Sensitivity: Input level (mV) required for reference recording level with input (REC) controls set to maximum.
8. Maximum Allowable Input: While decreasing settings of input (REC) level controls and increasing level at input jacks, this is the maximum input level (mV) at the point where recording amplifier output waveform becomes clipped.
9. Reference Output Level: Playback output level when meter indicates 0dB.
10. Maximum Output Level: Playback output level with respect to reference recording level when output (PLAY) level controls are set to maximum.



420(W) x 187(H) x 369.5(D)mm Max.

* with rackmount adaptor JA-R102

* 480(W) x 187(H) x 380(D)mm Max.

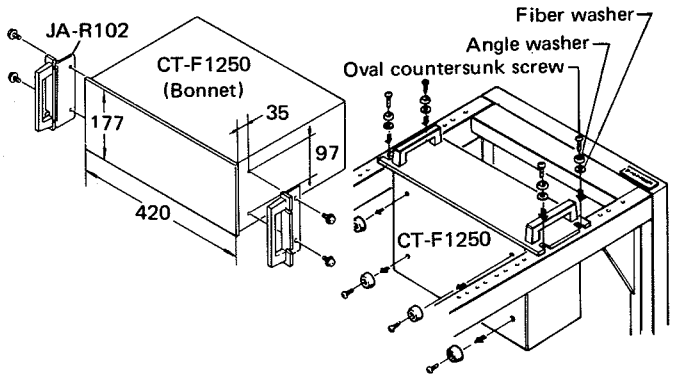
TROUBLESHOOTING

Although some failures and breakdowns can be traced to legitimate mechanical faults, some are in fact the results of improper maintenance, tape defects or lack of experience in operating the tape deck. If you think that there is a failure, refer first to the following checklist.

Symptom	Cause	Remedy
Tape does not run.	1. AC cord is not plugged in. 2. Tape has run out. 3. PAUSE button is set to ON. 4. Cassette is inserted improperly.	1. Plug cord correctly. 2. Rewind tape. 3. Depress PAUSE button to OFF. 4. Remove tape and insert properly.
High frequencies are weak.	1. Heads are dirty. 2. TAPE CALIBRATION SYSTEM and TAPE selector are not set in accordance with tape during recording or playback. 3. A recorded tape without using the Dolby NR system is being played back with DOLBY NR switch set to ON.	1. Clean heads. 2. Adjust TAPE CALIBRATION SYSTEM and, set TAPE selector correctly in accordance with tape. 3. Depress DOLBY NR switch to OFF.
No playback sound.	1. OUTPUT controls are set to leftmost positions. 2. MONITOR switch is set to SOURCE.	1. Turn controls to suitable position. 2. Set MONITOR switch to TAPE.
Playback sound is distorted.	1. Playback level is too high. 2. Distortion is recorded on tape.	1. Reduce playback level. 2. Replace cassette tape.
Sound is unsteady.	1. Dirty capstan. 2. Irregular cassette tape winding.	1. Clean capstan. 2. Replace tape.
Excessive noise.	1. Tape is old. 2. Recorded tape using the Dolby NR system is being played back with DOLBY NR switch set to OFF.	1. Replace tape. 2. Depress DOLBY NR switch to ON.
Cannot record.	Cassette's erasure prevention tabs have been broken off.	Replace tape or cover tab openings with adhesive tape.
Recorded sound is distorted.	1. Input level is too high. 2. Dirty heads.	1. Reduce input level. 2. Clean heads.
Auto-stop mechanism is actuated before tape wound up.	MEMORY/REPEAT STOP switch is set to ON.	Depress MEMORY/REPEAT OFF switch to release.
Auto-stop mechanism does not act even if tape wound up.	MEMORY/REPEAT STOP or PLAY switch is set to ON.	Depress MEMORY/REPEAT OFF switch to release.

MOUNTING IN AN EIA STANDARD RACK

If you mount the JA-R102 (made by Pioneer) which is available as an option onto the CT-F1250, you will be able to mount your deck into an audio rack featuring a 4U pitch and conforming to EIA standards. The mounting procedure is simple: just remove the two screws at either side in front which hold the deck's bonnet in place, and then mount the JA-R102 onto the deck with the JA-R102's accessory screws. For further details, refer to the JA-R102's instructions booklet.



PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
U.S. PIONEER ELECTRONICS CORPORATION 85 Oxford Drive, Moonachie, New Jersey 07074, U.S.A.
PIONEER ELECTRONIC (EUROPE) N.V. Luithagen-Haven 9, 2030 Antwerp, Belgium
PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia
<80I01Y0S08>

Printed in Japan <RRB-104-B>